# West Virginia Department of Environmental Protection

Earl Ray Tomblin Governor

Division of Air Quality

Randy C. Huffman Cabinet Secretary

# Permit to Modify



R13-2831C

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Appalachia Midstream Services, LLC Miller Compressor Station 051-00130

John A. Benedict

Director

Issued: Draft • Effective: Draft

Facility Location: Bannen, Marshall County, West Virginia

Mailing Address: PO Box 54368, Oklahoma City, OK 73154-1368

Facility Description: Natural gas compressor station

NAICS Codes: 211111

UTM Coordinates: 532.48 km Easting • 4396.73 km Northing • Zone 17

Permit Type: Modification

Description of Change: Installation of five (5) additional compressor engines each equipped with an oxidation

catalyst, and one (1) glycol dehydration unit with still vent controlled by an air cooled condenser. This permitting action also revises emission calculations from the existing

glycol dehydration units using a recent extended gas analysis.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

This permit does not affect 45CSR30 applicability, the source is a nonmajor source subject to 45CSR30. The facility is not subject to the permitting requirements of 45CSR30 and is classified as a deferred source.

Unless otherwise stated WVDEP DAQ did not determine whether the permittee is subject to an area source air toxics standard requiring Generally Achievable Control Technology (GACT) promulgated after January 1, 2007 pursuant to 40 CFR 63, including the area source air toxics provisions of 40 CFR 63, Subpart HH and 40 CFR 63, Subpart ZZZZ.

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## 1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
EUCE-1	EPCE-1	Waukesha L5794 Compressor Engine	2010	1,380 hp	NSCR
EUCE-2	EUCE-2 EPCE-2 Waukesha L5794 Compressor Engine		2010	1,380 hp	NSCR
EUCE-3	EPCE-3	Waukesha L5794 Compressor Engine	2010	1,380 hp	NSCR
EUCE-4	EPCE-4	Waukesha L5794 Compressor Engine	2010	1,380 hp	NSCR
EUCE-5	EPCE-5	Waukesha L5794 Compressor Engine	2010	1,380 hp	NSCR
EUCE-6	EPCE-6	Waukesha L5794 Compressor Engine	2010	1,380 hp	NSCR
EUCE-7	EPCE-7	Caterpillar G3516B Compressor Engine	2012	1,380 hp	Oxid. Cat.
EUCE-8	EPCE-8	Caterpillar G3516B Compressor Engine	2012	1,380 hp	Oxid. Cat.
EUCE-9	EPCE-9	Caterpillar G3516B Compressor Engine	2012	1,380 hp	Oxid. Cat.
EUCE-10	EPCE-10	Caterpillar G3516B Compressor Engine	2012	1,380 hp	Oxid. Cat.
EUCE-11	EPCE-11	Caterpillar G3516B Compressor Engine	2012	1,380 hp	Oxid. Cat.
EUGEN-1	EPGEN-1	Capstone C600 Generator	2010	805 hp	None
EUGEN-2	EPGEN-2	Backup Capstone C600 Generator	2010	805 hp	None
EUDHY-1	EPSTL-1	Glycol Dehydration Unit Still Vent	2010	53.8 MMscfd	APCCOND-1
EUDHY-1	EPRBL-1	Glycol Reboiler	2010	1.0 mmBtu/hr	None
EUDHY-2	EPSTL-2	Glycol Dehydration Unit Still Vent	2010	53.8 MMscfd	APCCOND-2
EUDHY-2	EPRBL-2	Glycol Reboiler	2010	1.0 mmBtu/hr	None
EUDHY-3	EPSTL-3	Glycol Dehydration Unit Still Vent	2012	53.8 MMscfd	APCCOND-3
EUDHY-3	EPRBL-3	Glycol Reboiler	2012	1.0 mmBtu/hr	None
EUTK-1	EPTK-1	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-2	EPTK-2	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-3	EPTK-3	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-4	EPTK-4	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-5	EPTK-5	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-6	EPTK-6	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-7	EPTK-7	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-8	ЕРТК-8	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-9	ЕРТК-9	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-10	EPTK-10	Stabilized Condensate Storage Tank	2010	400 bbl	VRU
EUTK-11	EPTK-11	Pipeline Fluids/Water Storage Tank	2010	400 bbl	VRU
EUTK-12	EPTK-12	Pipeline Fluids/Water Storage Tank	2010	400 bbl	VRU
EULOR	EPLOR	Liquids Loadout Rack	2010	NA	Closed System
EUOH-1	ЕРОН-1	Hot Oil Heater	2010	3.35 MMBTU/hr	None
APCFLARE	APCFLARE	Flare	2010	65 scfh (pilot)	None

#### 2.0. General Conditions

#### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

#### 2.2. Acronyms

CAAA	Clean Air Act Amendments	NO <sub>X</sub>	Nitrogen Oxides
CBI	Confidential Business	NSPS	New Source Performance
	Information		Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	$PM_{2.5}$	Particulate Matter less than 2.5
C.F.R. or CFR	Code of Federal Regulations		μm in diameter
CO	Carbon Monoxide	$PM_{10}$	Particulate Matter less than
C.S.R. or CSR	Codes of State Rules		10μm in diameter
DAQ	Division of Air Quality	Ppb	Pounds per Batch
DEP	Department of Environmental	Pph	Pounds per Hour
	Protection	Ppm	Parts per Million
dscm	Dry Standard Cubic Meter	Ppm <sub>V</sub> or	Parts per Million by Volume
FOIA	Freedom of Information Act	ppmv	
HAP	Hazardous Air Pollutant	PSD	Prevention of Significant
HON	Hazardous Organic NESHAP		Deterioration
HP	Horsepower	Psi	Pounds per Square Inch
lbs/hr	Pounds per Hour	SIC	Standard Industrial
LDAR	Leak Detection and Repair		Classification
M	Thousand	SIP	State Implementation Plan
MACT	Maximum Achievable	$SO_2$	Sulfur Dioxide
	Control Technology	TAP	Toxic Air Pollutant
MDHI	Maximum Design Heat Input	TPY	Tons per Year
MM	Million	TRS	Total Reduced Sulfur
MMBtu/hr or	Million British Thermal Units	TSP	Total Suspended Particulate
mmbtu/hr	per Hour	USEPA	United States Environmental
MMCF/hr or	Million Cubic Feet per Hour		Protection Agency
mmcf/hr		UTM	Universal Transverse Mercator
NA	Not Applicable	VEE	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality	VOC	Volatile Organic Compounds
•	Standards	VOL	Volatile Organic Liquids
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

#### 2.3. Authority

This permit is issued in accordance with West Virginia air pollution control law W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;

#### 2.4. Term and Renewal

2.4.1. This permit supersedes and replaces R13-2831B. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

#### 2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2831, R13-2831A, R13-2831B, R13-2831C and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;

[45CSR§§13-5.11 and -10.3.]

- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

#### 2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

#### 2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

#### 2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4.]

#### 2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

#### 2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

#### 2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- Inspect at reasonable times (including all times in which the facility is in operation) any
  facilities, equipment (including monitoring and air pollution control equipment), practices, or
  operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

#### 2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to

the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
  - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

#### 2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

#### 2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

#### 2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

#### 2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

#### 2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13.

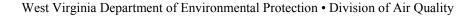
[45CSR§13-10.1.]

#### 2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

#### 2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.



#### 3.0. Facility-Wide Requirements

#### 3.1. Limitations and Standards

3.1.1. Open burning. The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.

[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.

[40CFR§61.145(b) and 45CSR§34]

- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1] [State Enforceable Only]
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.

[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.

[45CSR§11-5.2.]

#### 3.2. Monitoring Requirements

[Reserved]

#### 3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission

limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
  - 1. The permit or rule evaluated, with the citation number and language;
  - 2. The result of the test for each permit or rule condition; and,
  - 3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

#### 3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original stripchart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.
- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§4. State Enforceable Only.]

#### 3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director WVDEP Division of Air Quality 601 57<sup>th</sup> Street Charleston, WV 25304-2345 If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

#### 3.5.4. **Operating Fee**

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be

made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.



#### 4.0. Source-Specific Requirements

#### 4.1. Limitations and Standards

- 4.1.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
  - a. The date, place as defined in this permit, and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of the analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.
- 4.1.2. **Minor Source of Hazardous Air Pollutants (HAP).** HAP emissions from the facility shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of HAPs. Compliance with this Section shall ensure that the facility is a minor HAP source.
- 4.1.3. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate the NATCO BTEX Busters (APCCOND-1, APCCOND-2, APCCOND-3) and Flare King, Inc. Flare (APCFLARE) and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11.]

- 4.1.4. **Record of Malfunctions of Air Pollution Control Equipment.** For the NATCO BTEX Busters (APCCOND-1, APCCOND-2, APCCOND-3) and Flare King, Inc. Flare (APCFLARE), the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
  - a. The equipment involved.
  - b. Steps taken to minimize emissions during the event.
  - c. The duration of the event.
  - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

### 5.0. Source-Specific Requirements (Engines, EPCE-1 – EPCE-11, EPGEN-1, EPGEN-2)

#### **5.1. Limitations and Standards**

- 5.1.1. To demonstrate compliance with Section 5.1.2, the quantity of natural gas that shall be consumed in each of the 1,380 hp natural gas fired reciprocating engines, Waukesha L5794 GSI (EPCE-1 EPCE-6) shall not exceed 10,364 cubic feet per hour and 90.79 x 106 cubic feet per year for each engine.
- 5.1.2. Maximum emissions from each of the 1,380 hp natural gas fired reciprocating engines, Waukesha L5794 GSI (EPCE-1 EPCE-6) shall not exceed the following limits:

Pollutant	Maximum Hourly	Maximum Annual
	Emissions (lb/hr)	Emissions (ton/year)
Nitrogen Oxides	1.48	6.48
Carbon Monoxide	1.81	7.92
Volatile Organic Compounds	0.14	0.62
Formaldehyde	0.08	0.33

- 5.1.3. To demonstrate compliance with Section 5.1.4, the quantity of natural gas that shall be consumed in each of the 1,380 hp natural gas fired reciprocating engines, Caterpillar G3516B (EPCE-7 EPCE-11) shall not exceed 11,302 cubic feet per hour and 99.01 x 106 cubic feet per year for each engine.
- 5.1.4. Maximum emissions from each of the 1,380 hp natural gas fired reciprocating engines, Caterpillar G3516B (EPCE-7 EPCE-11) shall not exceed the following limits:

Pollutant	Maximum Hourly	Maximum Annual
	Emissions (lb/hr)	Emissions (ton/year)
Nitrogen Oxides	1.52	6.66
Carbon Monoxide	1.52	6.66
Volatile Organic Compounds	0.67	2.93
Formaldehyde	0.29	1.28

- 5.1.5. To demonstrate compliance with Section 5.1.6, the quantity of natural gas that shall be consumed in each of the 805 hp microturbine generators, Capstone C600 (EPGEN-1, EPGEN-2) shall not exceed 6,980 cubic feet per hour and 61.15 x 106 cubic feet per year.
- 5.1.6. Maximum emissions from each of the 805 hp microturbine generators, Capstone C600 (EPGEN-1, EPGEN-2) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.25	1.10
Carbon Monoxide	0.56	2.45

#### 5.1.7. Requirements for Use of Catalytic Reduction Devices

- a. Rich-burn natural gas compressor engines (EPCE-1 EPCE-6) equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controller to ensure emissions of regulated pollutants do not exceed the potential to emit for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to ensure a fuel-rich mixture and a resultant exhaust oxygen content of less than or equal to 0.5%.
- b. For natural gas compressor engines (EPCE-1 EPCE-11), the permittee shall monitor the temperature to the inlet of the catalyst and in accordance with manufacturer's specifications, a high temperature alarm shall shut off the engine before thermal deactivation of the catalyst occurs. If the engine shuts off due to high temperature, the permittee shall also check for thermal deactivation of the catalyst before normal operations are resumed.
- c. At least once per calendar quarter, the permittee shall conduct portable analyzer strip checks of Nitrogen Oxides (NO<sub>x</sub>) and Carbon Monoxide (CO) emissions from the engines when operating under representative conditions for that period to ensure proper operation of the catalytic reduction devices. The portable analyzer strip checks shall be conducted using the following procedure:
  - 1. Samples of pollutant concentrations should be taken from sample ports in the stack or using a "Shepherd's hook" from a location in the stack such that a representative concentration is measured and bias (e.g., air leakage at weep holes) is prevented. The use of stainless steel tubing ran from sampling site to ground level may be used. A single sampling location near the center of the duct may be selected.
  - 2. The emissions check should produce at least one test strip of concentration data for each of O<sub>2</sub>, NO, NO<sub>2</sub> and CO. The analyzer should be run for minimum of 5 minutes to allow readings to stabilize. Then run analyzer for 5 minutes and verify stability in concentrations. Print a representative test strip on the analyzer.
  - 3. With this test strip include (when available) unit number or lease name, rpm, manifold pressure, compressor suction and discharge pressures and any other information that may help determine horsepower during test.
- d. Upon request by the Director, testing shall be conducted using a portable analyzer in accordance with the MidCon Compression portable analyzer protocol submitted with Permit Application R13-2831B or other approved control. Such controls shall ensure proper and efficient operation of the engine and air pollution control devices.
- e. During any calendar quarter when a performance test is required under Section 3.3 or Section 10 of this permit, those test results will satisfy the requirements of Section 5.1.10.c in lieu of a portable analyzer strip check.

#### **5.2.** Monitoring Requirements

- 5.2.1. Catalytic Oxidizer Control Devices
  - a. The permittee shall regularly inspect, properly maintain and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of the engine's physical and operational design. The permittee shall ensure proper operation, maintenance and performance of catalytic reduction devices and auxiliary air pollution control devices by:
    - 1. Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller.
    - 2. Following operating and maintenance recommendations of the catalyst element manufacturer.

#### **5.3.** Recordkeeping Requirements

5.3.1. To demonstrate compliance with sections 5.1-5.6, the permittee shall maintain records of the amount of natural gas consumed in each engine and the hours of operation of each engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.



#### 6.0. Source-Specific Requirements (Hot Oil Heater, EPOH-1)

#### 6.1. Limitations and Standards

- 6.1.1. Maximum Design Heat Input. The maximum design heat input for the Hot Oil Heater (EPOH-1) shall not exceed 3.35 mmBtu/hr.
- 6.1.2. Maximum emissions from the 3.35 MMBtu/hr Hot Oil Heater (EPOH-1) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.34	1.49
Carbon Monoxide	0.28	1.23
Particulate Matter-10	0.03	0.14
Sulfur Dioxide	0.01	0.01

- 6.1.3. To demonstrate compliance with Section 6.1.2, the quantity of natural gas that shall be consumed in the 3.35 MMBtu/hr Hot Oil Heater (EPOH-1) shall not exceed 3,350 cubic feet per hour and  $29.35 \times 10^6$  cubic feet per year.
- 6.1.4. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.]

#### 6.2. Monitoring Requirements

6.2.1. For the purpose of determining compliance with the opacity limits of 45CSR2, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 as soon as practicable, but within seventy-two (72) hours of the final visual emission check. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

#### **6.3.** Testing Requirements

6.3.1. Compliance with the visible emission requirements of section 6.1.4 shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of section 6.1.14. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

[45CSR§2-3.2.]

#### 6.4. Recordkeeping Requirements

- 6.4.1. To demonstrate compliance with sections 6.1.1-6.1.3, the permittee shall maintain records of the amount of natural gas consumed in the 3.35 MMBtu/hr Hot Oil Heater (EPOH-1). Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 6.4.2. The permittee shall maintain records of all monitoring data required by Section 6.2.1 documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

#### 6.5. Reporting Requirements

6.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

7.0. Source-Specific Hazardous Air Pollutant Requirements (Natural Gas Dehydration Units (EUDHY-1, EUDHY-2, EUDHY-3) Not Subject to MACT Standards and being controlled by Recycling the Dehydration Unit Back to Flame Zone of Reboiler)

#### 7.1. Limitations and Standards

7.1.1. Maximum Throughput Limitation. To demonstrate compliance with Section 7.1.5, the maximum wet natural gas throughput to the glycol dehydration unit/still columns shall not exceed the following.

Emission Point ID	Maximum Wet Natural Gas Throughput
EPSTL-1	53.8 mmscf/day
EPSTL-2	53.8 mmscf/day
EPSTL-3	53.8 mmscf/day

7.1.2. Maximum Design Heat Input. The maximum design heat input for the Glycol Reboilers shall not exceed the following limits:

Emission Point ID	Maximum Design Heat Input
EPRBL-1	1.0 mmBtu/hr
EPRBL-2	1.0 mmBtu/hr
EPRBL-3	1.0 mmBtu/hr

- 7.1.3. To demonstrate compliance with Section 7.1.4, the quantity of natural gas that shall be consumed in each of the 1.0 MMBtu/hr Glycol Reboilers (EPRBL-1, EPRBL-2, EPRBL-3) shall not exceed 1,000 cubic feet per hour and 8.76 x 10<sup>6</sup> cubic feet per year for each reboiler.
- 7.1.4. Maximum emissions from each of the Glycol Reboilers (EPRBL-1, EPRBL-2, EPRBL-3) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.10	0.44
Carbon Monoxide	0.08	0.35
Volatile Organic Compounds	0.01	0.04
Particulate Matter-10	0.01	0.05
Sulfur Dioxide	0.01	0.01

7.1.5. Maximum emissions from each of the Glycol Regenerator Still Columns (EPSTL-1, EPSTL-2, EPSTL-3) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Volatile Organic Compounds	0.75	3.26
Benzene	0.05	0.21
Toluene	0.11	0.47
Xylenes	0.05	0.20
n-Hexane	0.02	0.08
Total HAPs	0.22	0.96

- 7.1.6. For purposes of determining potential HAP emissions at production-related facilities, the methods specified in 40 CFR 63, Subpart HH (i.e. excluding compressor engines from HAP PTE) shall be used.
- 7.1.7. Each glycol dehydration unit/still column (EPSTL-1, EPSTL-2, EPSTL-3) shall be equipped with a fully functional NATCO BTEX Buster (APCCOND-1, APCCOND-2, APCCOND-3) at all times. The NATCO BTEX Buster (APCCOND-1, APCCOND-2, APCCOND-3) shall be operated according to manufacturer's specifications, and shall be properly maintained in a manner which prevents the unit from freezing.
- 7.1.8. Recycled reboilers subject to this section shall be designed and operated in accordance with the following:
  - a. The vapors/overheads from the still column shall be routed through a closed vent system to the reboiler at all times when there is a potential that vapors (emissions) can be generated from the still column.
  - b. The reboiler shall only be fired with vapors from the still column, and natural gas may be used as supplemental fuel.
  - c. The vapors/overheads from the still column shall be introduced into the flame zone of the reboiler.

#### 7.2. Monitoring Requirements

- 7.2.1. The permittee shall monitor the throughput of wet natural gas fed to the dehydration system on a monthly basis for the glycol dehydration units (EUDHY-1, EUDHY-2, EUDHY-3).
- 7.2.2. The permittee shall monitor the throughput of liquid gathered in storage from the condenser on a monthly basis.

#### 7.3. Recordkeeping Requirements

- 7.3.1. The permittee shall maintain a record of the wet natural gas throughput through the glycol dehydration units (EUDHY-1, EUDHY-2, EUDHY-3) to demonstrate compliance with section 7.1.1 of this permit. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 7.3.2. The permittee shall maintain a record of the condensate gathered from the condenser to demonstrate compliance with section 7.2.2 of this permit. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 7.3.3. To demonstrate compliance with section 7.1.3, 7.1.4, and 7.1.5 the permittee shall maintain records of the amount of natural gas consumed in the Glycol Reboilers (EPRBL-1, EPRBL-2, EPRBL-3). Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 7.3.4. For the purpose of demonstrating compliance with section 4.1.2 and 7.1.6, the permittee shall maintain a record of all potential to emit (PTE) HAP calculations for the entire affected facility. These records shall include the natural gas compressor engines and ancillary equipment.

#### 8.0. Source-Specific Requirements (Flare Control Device, APCFLARE)

#### 8.1. Limitations and Standards

- 8.1.1. The permittee shall install a flare (APCFLARE) to control VOC emissions from upset conditions or maintenance activities as needed. To demonstrate compliance with Section 10.1.2, the quantity of flare gas that shall be consumed in the flare shall not exceed 50,000 cubic feet per hour. Compliance with the flare gas throughput limit shall be demonstrated using a rolling 12-month total.
- 8.1.2. Maximum emissions from the flare (APCFLARE) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Volatile Organic Compounds	23.54	3.10
Nitrogen Oxides	5.36	0.78
Carbon Monoxide	29.08	3.88

- 8.1.3. For purposes of determining potential HAP emissions at production-related facilities, the methods specified in 40 CFR 63, Subpart HH (i.e. excluding compressor engines from HAP PTE) shall be used.
- 8.1.4. The flare (APCFLARE) subject to this section shall be designed and operated in accordance with the following:
  - a Flare shall be steam-assisted, air-assisted, or non-assisted.
  - b. Flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
  - c. Flare shall be operated, with a flame present at all times whenever emissions may be vented to them, except during SSM (Startup, Shutdown, Malfunctions) events.
  - d. A flare shall be used only where the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or where the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

Where:

 $H_T$ =Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.

K=Constant=

$$1.740 \times 10^{-7} \left(\frac{1}{ppmv}\right) \left(\frac{g \cdot \text{mole}}{\text{scm}}\right) \left(\frac{\text{MJ}}{\text{kcal}}\right)$$

where the standard temperature for (g-mole/scm) is 20 °C.

C<sub>i</sub>=Concentration of sample component i in ppmv on a wet basis, which may be measured for organics by Test Method 18, but is not required to be measured using Method 18 (unless designated by the Director).

 $H_i\!\!=\!\!Net$  heat of combustion of sample component i, kcal/g-mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 or 88 or D4809–95 if published values are not available or cannot be calculated.

n=Number of sample components.

- e. <u>Steam-assisted and nonassisted flares</u> shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided by 8.1.4.f and 8.1.4.g of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), by the unobstructed (free) cross-sectional area of the flare tip, which may be determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, but is not required to be determined using these Methods (unless designated by the Director).
- f. <u>Steam-assisted and nonassisted flares</u> designed for and operated with an exit velocity, as determined by the method specified in 8.1.4.e. of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
- g. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 8.1.4.e. of this section, less than the velocity  $V_{max}$ , as determined by the calculation specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity,  $V_{max}$ , for flares complying with this paragraph shall be determined by the following equation:

$$Log_{10}(V_{max})=(H_T+28.8)/31.7$$

Where:

V<sub>max</sub>=Maximum permitted velocity, m/sec.

28.8=Constant.

31.7=Constant.

H<sub>T</sub>=The net heating value as determined in 8.1.4.d of this section

h. <u>Air-assisted flares</u> shall be designed and operated with an exit velocity less than the velocity  $V_{max}$ . The maximum permitted velocity,  $V_{max}$ , for air-assisted flares shall be determined by the following equation:

$$V_{\text{max}} = 8.71 + 0.708(H_T)$$

Where:

V<sub>max</sub>=Maximum permitted velocity, m/sec.

8.71=Constant.

0.708=Constant.

 $H_T$ =The net heating value as determined in 8.1.4.d of this section.

8.1.5. The permittee is not required to conduct a flare compliance assessment for concentration of sample (i.e. Method 18) and tip velocity (i.e. Method 2) until such time as the Director requests a flare compliance assessment to be conducted in accordance with section 8.3.2, but the permittee is required to conduct a flare design evaluation in accordance with section 8.4.2. Alternatively, the permittee may elect to demonstrate compliance with the flare design criteria requirements of section 8.1.4 by complying with the compliance assessment testing requirements of section 8.3.2.

#### **8.2.** Monitoring Requirements

- 8.2.1. In order to demonstrate compliance with the requirements of 8.1.4.c, the permittee shall monitor the presence or absence of a flare pilot flame using a thermocouple or any other equivalent device, except during SSM events.
- 8.2.2. The permittee shall monitor the throughput to the flare (APCFLARE) on a monthly basis.

#### 8.3. Testing Requirements

- 8.3.1. In order to demonstrate compliance with the flare opacity requirements of 8.1.4.b the permittee shall conduct a Method 22 opacity test for at least two hours. This test shall demonstrate no visible emissions are observed for more than a total of 5 minutes during any 2 consecutive hour period using 40CFR60 Appendix A Method 22. The permittee shall conduct this test within one (1) year of permit issuance or initial startup whichever is later. The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 CFR part 60, appendix A, Method 22 or from the lecture portion of 40 CFR part 60, appendix A, Method 9 certification course.
- 8.3.2. The Director may require the permittee to conduct a flare compliance assessment to demonstrate compliance with section 8.1.4. This compliance assessment testing shall be conducted in accordance with Test Method 18 for organics and Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60, as appropriate, or other equivalent testing approved in writing by the Director. Also, Test Method 18 may require the permittee to conduct Test Method 4 in conjunction with Test Method 18.
- 8.3.3. In order to demonstrate compliance with 8.1.3, upon request of the Director, the permittee shall demonstrate compliance with the HAP emissions thresholds using GLYCalc Version 3.0 or higher. The permittee shall sample in accordance with GPA Method 2166 and analyze the samples utilizing the extended GPA Method 2286 as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook.

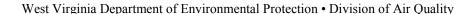
#### 8.4. Recordkeeping Requirements

- 8.4.1. For the purpose of demonstrating compliance with section 8.1.4.c and 8.2.1, the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent.
- 8.4.2 For the purpose of demonstrating compliance with section 8.1.4 and 8.3.2, the permittee shall maintain a record of the flare design evaluation. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, and all supporting concentration calculations and other related information requested by the Director.
- 8.4.3 For the purpose of demonstrating compliance with the requirements set forth in sections 8.1.4 and 8.3.3., the permittee shall maintain records of testing conducted in accordance with 8.3.3.
- 8.4.4. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of 8.2 and testing requirements of 8.3.
- 8.4.5. For the purpose of demonstrating compliance with section 8.1.4.b, the permittee shall maintain records of the visible emission opacity tests conducted per Section 8.3.1.

- 8.4.6. For the purpose of demonstrating compliance with section 8.1.3, the permittee shall maintain a record of all potential to emit (PTE) HAP calculations for the entire affected facility. These records shall include the natural gas compressor engines and ancillary equipment.
- 8.4.7. All records required under Section 8.4 shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

#### 8.5. Reporting Requirements

- 8.5.1 If permittee is required by the Director to demonstrate compliance with section 8.3.3, then the permittee shall submit a testing protocol at least thirty (30) days prior to testing and shall submit a notification of the testing date at least fifteen (15) days prior to testing. The permittee shall submit the testing results within sixty (60) days of testing and provide all supporting calculations and testing data.
- 8.5.2. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
- 8.5.3. Any deviation(s) from the flare design and operation criteria in Section 8.1.4 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of discovery of such deviation.



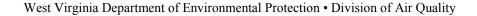
# 9.0. Source-Specific Requirements (Liquids Loadout Rack, EPLOR, Non-Fractionating Processing Plant)

#### 9.1. Limitations and Standards

- 9.1.1. Maximum Throughput Limitation. The maximum natural gas liquids throughput to the Natural Gas Liquids Loadout Rack (EPLOR) shall not exceed 20,000 gal/day and 13.797 x 10<sup>6</sup> gal/yr. Compliance with the Maximum Throughput Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the monthly throughput at any given time during the previous twelve consecutive calendar months.
- 9.1.2. The Natural Gas Liquids Loadout Rack (EPLOR) shall be operated in accordance with the plans and specifications filed in Permit Application R13-2831. The system will employ a vapor balance (closed system).
- 9.1.3. The permitted facility shall comply with all applicable provisions of 40CFR60 Subpart KKK, provided that compliance with any more stringent limitation set forth under this permit shall also be demonstrated. Recordkeeping and reporting requirements shall be conducted in accordance with \$60.635 and \$60.636. These reports shall be submitted in accordance with the time lines and in the order set forth in \$60.636 and submitted to the addresses listed in Section 3.5.3.

#### 9.2. Recordkeeping Requirements

9.2.1. To demonstrate compliance with section 9.1.1 the permittee shall maintain records of the amount of natural gas liquids processed in the Natural Gas Liquids Loadout Rack (EPLOR), Non-Fractionating Processing Plant. Said records required shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.



# 10.0. Source-Specific Requirements (40CFR60 Subpart JJJJ Requirements, EPCE-1 – EPCE-11, EPGEN-1, EPGEN-2)

#### 10.1. Limitations and Standards

- 10.1.1. The provisions of this subpart are applicable to owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified below. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
  - a. Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:
    - 1. On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
    - 2. on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
    - 3. on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
    - 4. on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).
  - b. Owners and operators of stationary SI ICE that commence modification or reconstruction after June 12, 2006.

[40CFR§60.4230(a)]

- 10.1.2. The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine test cell/stand. [40CFR§60.4230(b)]
- 10.1.3. If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable. [40CFR§60.4230(c)]
- 10.1.4. For the purposes of this subpart, stationary SI ICE using alcohol-based fuels are considered gasoline engines. [40CFR§60.4230(d)]
- 10.1.5. Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security. [40CFR§60.4230(e)]

#### 10.2. Emission Standards for Owners and Operators

- 10.2.1. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that are rich burn engines that use LPG must comply with the emission standards in §60.4231(c) for their stationary SI ICE. [40CFR§60.4233(c)]
- 10.2.2. Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except

gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified. [40CFR§60.4233(e)]

- 10.2.3. Owners and operators of stationary SI wellhead gas ICE engines may petition the Administrator for approval on a case-by-case basis to meet emission standards no less stringent than the emission standards that apply to stationary emergency SI engines greater than 25 HP and less than 130 HP due to the presence of high sulfur levels in the fuel, as specified in Table 1 to this subpart. The request must, at a minimum, demonstrate that the fuel has high sulfur levels that prevent the use of after treatment controls and also that the owner has reasonably made all attempts possible to obtain an engine that will meet the standards without the use of after treatment controls. The petition must request the most stringent standards reasonably applicable to the engine using the fuel. [40CFR§60.4233(g)]
- 10.2.4. Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section. [40CFR§60.4233(h)]
- 10.2.5. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine. [40CFR§60.4234]

#### 10.3. Other Requirements for Owners and Operators

- 10.3.1. After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in §60.4233. [40CFR§60.4236(a)]
- 10.3.2. After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in \$60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in \$60.4233 may not be installed after January 1, 2010. [40CFR\$60.4236(b)]
- 10.3.3. For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in \$60.4233 after January 1, 2011. [40CFR\\$60.4236(c)]
- 10.3.4. The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location. [40CFR§60.4236(e)]
- 10.3.5. Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter. [40CFR§60.4237(b)]

#### 10.4. Compliance Requirements for Owners and Operators

10.4.1. If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. You must also

meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

- a. If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator.
- b. If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.
  - 1. If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.
  - 2. If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.
  - 3. If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

[40CFR§60.4243(a)]

- 10.4.2. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.
  - a. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.
  - b. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.
    - If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.
    - 2. If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent

with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40CFR§60.4243(b)]

- 10.4.3. If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in §60.4233(f), you must demonstrate compliance according paragraph (b)(2)(i) or (ii) of this section, except that if you comply according to paragraph (b)(2)(i) of this section, you demonstrate that your non-certified engine complies with the emission standards specified in §60.4233(f). [40CFR§60.4243(c)]
- 10.4.4. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal. State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. [40CFR§60.4243(d)]
- 10.4.5. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of \$60.4233. [40CFR\$60.4243(e)]
- 10.4.6. If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). [40CFR§60.4243(f)]
- 10.4.7. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40CFR§60.4243(g)]
- 10.4.8. If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in sections 60.4233(b) or (c), you must comply by one of the methods specified in paragraphs (h)(1) through (h)(4) of this section.
  - a. Purchasing an engine certified according to 40 CFR part 1048. The engine must be installed and configured according to the manufacturer's specifications.

- b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
- c. Keeping records of engine manufacturer data indicating compliance with the standards.
- d. Keeping records of control device vendor data indicating compliance with the standards.

[40CFR§60.4243(h)]

#### 10.5. Testing Requirements for Owners and Operators

- 10.5.1. Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.
  - a. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart. [40CFR§60.4244(a)]
  - b. You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine. [40CFR§60.4244(b)]
  - c. You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour. [40CFR§60.4244(c)]
  - d. To determine compliance with the  $NO_X$  mass per unit output emission limitation, convert the concentration of  $NO_X$  in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_4 \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr}$$
 (Eq. 1)

Where:

 $ER = Emission rate of NO_X in g/HP-hr.$ 

C<sub>d</sub>= Measured NO<sub>X</sub> concentration in parts per million by volume (ppmv).

 $1.912\times10-3$  = Conversion constant for ppm  $NO_X$  to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

[40CFR§60.4244(d)]

d. To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_4 \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr}$$
 (Eq. 2)

Where:

ER = Emission rate of CO in g/HP-hr.

 $C_d$ = Measured CO concentration in ppmv.

1.164×10−3 = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

[40CFR§60.4244(e)]

e. For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_4 \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr}$$
 (Eq. 3)

Where:

ER = Emission rate of VOC in g/HP-hr.

C<sub>d</sub>= VOC concentration measured as propane in ppmv.

1.833×10–3 = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

[40CFR§60.4244(f)]

f. If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{sa}}{C_{si}} \qquad (Eq. 4)$$

Where:

RF<sub>i</sub>= Response factor of compound i when measured with EPA Method 25A.

C<sub>Mi</sub>= Measured concentration of compound i in ppmv as carbon.

C<sub>Ai</sub>= True concentration of compound i in ppmv as carbon.

$$C_{ims} = RF \times C_{imss}$$
 (Eq. 5)

Where:

 $C_{icorr}$ = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

 $C_{imeas}$ = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Rq} = 0.6098 \times C_{loom}$$
 (Eq. 6)

Where:

C<sub>Peq</sub>= Concentration of compound i in mg of propane equivalent per DSCM.

[40CFR§60.4244(g)]

#### 10.6. Notification, Reports, and Records for Owners and Operators

- 10.6.1. Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.
  - a. Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
    - 1. All notifications submitted to comply with this subpart and all documentation supporting any notification.
    - 2. Maintenance conducted on the engine.
    - 3. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90 and 1048.
    - 4. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

[40CFR§60.4245(a)]

b. For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the

operation as emergency and how many hours are spent for non-emergency operation. [40CFR§60.4245(b)]

- c. Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.
  - 1. Name and address of the owner or operator;
  - 2. The address of the affected source;
  - 3. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
  - 4. Emission control equipment; and
  - 5. Fuel used.

[40CFR§60.4245(c)]

d. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. [40CFR§60.4245(d)]



#### 11.0. Source-Specific Requirements (Storage Tanks, EPTK-1-EPTK-12)

#### 11.1. Limitations and Standards

- 11.1.1. Emissions from the storage tanks (EPTK-1 EPTK-12) shall controlled by a vapor recovery system, prior to release to the atmosphere. This vapor recovery system shall be designed to achieve a minimum guaranteed control efficiency of 98% for volatile organic compound (VOC) emissions.
- 11.1.2. The vapor recovery system must be installed and operating prior to start-up of the storage tanks (EPTK-1 EPTK-12).

#### 11.2. Testing Requirements

- 11.2.1. For the purposes of determining compliance with Section 11.1.1, the permittee shall conduct monitoring to show compliance with the capture efficiency requirement of the storage tank (EPTK-1 EPTK-12). The monitoring shall be conducted initially within 60 days after achieving the maximum production rate at which the facility will be operated or within 180 days of start-up, whichever is earlier. Monitoring will be conducted once every calendar year thereafter per the requirements of §60.482-10.
  - a. The vapor recovery system will be operated and monitored in compliance with §60.482-10(b), (f) through (m), and §60.485.
  - b. Records of the vapor recovery system will be maintained according to the requirements of §60.486 and §60.635(b).
- 11.2.2. The Director may approve or specify additional testing for demonstrating compliance with Section 11.1.1.

#### 11.3. Recordkeeping Requirements

11.3.1. The vapor recovery system will comply with the recordkeeping requirements of §60.486 and §60.635(b).

#### 11.4. Reporting Requirements

11.4.1. The permittee shall submit a written report of the results of testing required in 11.2.1 of this permit before the close of business on the 60th day following the completion of such testing to the Director. Such report(s) shall include all records of the control device performance parameters taken during such testing, whichever is appropriate for the required report.

#### CERTIFICATION OF DATA ACCURACY

	I, the undersigned, hereby certify that, based on information and belief for	ormed after reasonable
inquiry, all in	formation contained in the attached	, representing the
period beginn	ing and ending	_, and any supporting
	documents appended hereto, is true, accurate, and complete.	
Signature <sup>1</sup>		
(please use blue ink)	Responsible Official or Authorized Representative Date	
Name & Title (please print or type)	Name	
Telephone No.	Fax No	

- This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:
  - a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
    - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
    - (ii) the delegation of authority to such representative is approved in advance by the Director;
  - b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
  - c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
  - d. The designated representative delegated with such authority and approved in advance by the Director.